KEEGAN, WERLIN & PABIAN, LLP

ATTORNEYS AT LAW
21 CUSTOM HOUSE STREET
BOSTON, MASSACHUSETTS 02110-3525

(617) 951-1400

TELECOPIERS:
(617) 951-1354
(617) 951-0586

DAVID S. ROSENZWEIG
E-mail: drosen@kwplaw.com

June 5, 2003

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd Floor
Boston, MA 02110

Re: Investigation on Distributed Generation, D.T.E 02-38

Dear Secretary Cottrell:

I have enclosed an original and ten (10) copies of the comments of Boston Edison Company, Cambridge Electric Light Company and Commonwealth Electric Company d/b/a NSTAR Electric in response to the Request for Comments issued on May 19, 2003 concerning the Proposed Uniform Standards for Interconnecting Distributed Generation in Massachusetts and the proposed interconnections standards tariff submitted to the Department of Telecommunications and Energy by the Massachusetts Distributed Generation Interconnection Collaborative.

If there are any questions regarding this submittal please do not hesitate to contact me. Thank you for your attention to this matter.

Very truly yours,

David S. Rosenzweig

Enclosures

cc: William H. Stevens, Jr., Hearing Officer

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation on Distributed Generation	)	D.T.E. 02-38

NSTAR ELECTRIC COMMENTS ON JOINT REPORT AND INTERCONNECTION TARIFF SUBMITTED BY THE MASSACHUSETTS DISTRIBUTED GENERATION INTERCONNECTION COLLABORATIVE

I. INTRODUCTION

NSTAR Electric[1] hereby submits comments in response to the Request for Comments issued on May 19, 2003 concerning the Proposed Uniform Standards for Interconnecting Distributed Generation in Massachusetts (the "Joint Report") and the proposed interconnections standards tariff (the "Interconnection Tariff") submitted to the Department of Telecommunications and Energy (the "Department") by the Massachusetts Distributed Generation Interconnection Collaborative (the "Collaborative").

The Department has recognized the importance of distributed generation ("DG") as a resource option in the restructured electric industry.[2] Notice of Investigation into Distributed Generation, D.T.E. 02-38, at 1 (June 13, 2002). NSTAR Electric agrees that DG, if used appropriately, has potential benefits for customers. However, as the

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1 NSTAR Electric is composed of Boston Edison Company, Commonwealth Electric Company and Cambridge Electric Light Company.

2 General Laws c. 164, § 1 defines distributed generation as "a generation facility or renewable energy facility connected directly to distribution facilities or to retail customer facilities which alleviate or avoid transmission or distribution constraints or the installation of new transmission facilities or distribution facilities."

Department has also acknowledged, care must be taken to ensure that DG interconnection with the utility system is accomplished in a manner that promotes system reliability, safety, efficiency and economic savings for distribution companies, their customers and their employees. Id.

To address these complex issues, the Department has directed interested parties to commence a collaborative process in an effort to establish a joint proposal on the material issues. Order Establishing a Distributed Generation Collaborative Forum, D.T.E. 02-38-A at 3 (October 3, 2002). Pursuant to the directives of the Department in D.T.E. 02-38-A, the Collaborative met for numerous plenary and working-group meetings to reach consensus on a wide variety of recommendations on simplified, statewide technical standards and procedures for DG. The Collaborative, comprising DG providers, government/quasi-government agencies, consumers, distribution companies, and public interest groups, has worked diligently to develop a comprehensive Interconnection Tariff for Distributed Generation bringing together the diverse interests of over twenty different stakeholders.[3] The participants have worked assiduously, and with a strong collaborative spirit over many hours, to produce the Interconnection Tariff. NSTAR Electric is confident that the Interconnection Tariff will provide a solid foundation for helping the Department and all of the stakeholders achieve the objective of developing sound and cost-effective DG policy in Massachusetts.

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[3] The Collaborative's Interconnection Tariff reflects consensus on every substantive issue, except for the five discrete issues discussed, infra, in Section II.

In addition to the creation of the Collaborative's proposed Interconnection Tariff, the Collaborative has agreed to meet quarterly over the next two years to examine the experience with DG interconnections in Massachusetts and elsewhere in the United States and to refine, where appropriate, the processes and procedures applicable to successful DG interconnection operations. The Collaborative will report back to the Department annually with its findings and any recommendations for further refinements and improvements.

NSTAR Electric appreciates the opportunity to comment on the Interconnection Tariff and the few remaining issues that have not been resolved fully by the Collaborative. NSTAR Electric believes that the Interconnection Tariff offers an excellent first step toward the efficient development of cost-effective DG in Massachusetts. As stated above, the Collaborative consisted of parties with diverse backgrounds, representing the full spectrum of interests attendant to DG. The negotiations that ensued required substantial give-and-take among the parties and the end product reflects a delicate balance of competing interests. NSTAR Electric submits that the Department should adopt the recommendations offered by the Collaborative in order to preserve the basic structure agreed upon by the parties. Accordingly, NSTAR Electric requests that the Department approve the proposed Interconnection Tariff, as it has been submitted to the Department, with the proposed Utility Cluster language alternatives, in those few instances where no consensus was achieved.

II. ISSUES

A. DG Customers Should Be Responsible for the Actual Cost of Interconnection Facilities Constructed on Their Behalf.

Section 5.1 of the Interconnection Service Agreement reflects a disagreement between the DG Cluster and the Utility Cluster concerning the obligation of the DG installation to pay for the costs actually incurred to construct required system modifications and to perform system studies. Although the principle of actual cost recovery was an early "bedrock" principle in the deliberations of the Collaborative, the DG Cluster now requests that distribution companies be required to provide them with a capped, "not-to-exceed" price for system modifications and system studies associated with new interconnections, placing the risk of unforeseen or unexpected costs on the distribution companies and their other customers.

NSTAR Electric opposes this proposal because it unfairly shifts the construction cost risk from the DG to the distribution company and its other customers, potentially allowing the DG to obtain new facilities at less than the full cost incurred by the distribution company to construct them. Instead, full cost recovery should be paid by the DG to the distribution company reflecting the actual cost of necessary studies and required system modifications. This approach is consistent with the Department's long-standing ratemaking principles of cost causation and avoiding subsidies among customers. Electric Industry Restructuring, D.P.U. 96-100, at 51 (1996), citing, Massachusetts Electric Company, D.P.U. 95-40, at 144-145 (1995); Boston Gas Company, D.P.U. 93-60, at 331-332 (1993); Cambridge Electric Light Company, D.P.U. 92-250, at 163-164, 194-195 (1993); Western Massachusetts Electric Company, D.P.U.

91-290, at 44-45 (1992). By allocating the actual cost of new facilities to the customer who causes those costs to be incurred, fairness to all customers is ensured and an accurate picture of the economic efficiency of the DG installation is achieved. Commonwealth Electric Company, D.P.U. 93-41, at 26 (1993) ("The Department has held that economic efficiency in rate setting is achieved when the rates charged reflect the incremental cost to a utility of producing one additional unit of output, so that customers receive an accurate price signal upon which to base consumption.").

To expose a distribution company and its other customers to essentially a "fixed cost" risk, as proposed by the DG Cluster, is inconsistent with the Joint Report, which states that "[i]n all cases, the Customer will pay for the cost of the modifications that are attributable to its proposed project." Joint Report at 6. Indeed, the Interconnection Tariff itself establishes this principle in Section 5.2 and Section 5.3, which state:

> **5.2 Interconnection Equipment Costs**
>
> The Interconnecting Customer shall be responsible for **all costs** associated with the installation and construction of the Facility and associated interconnection equipment on the Interconnecting Customer's side of the PCC.
>
> **5.3 System Modification Costs**
>
> The Interconnecting Customer shall also be responsible for **all costs** reasonably incurred by Company attributable to the proposed interconnection project in designing, constructing, operating and maintaining the System Modifications. . . .

Id. (emphasis added).

Full cost recovery is also consistent with the Department's practice and precedent involving the costs associated with adding new customers. If the distribution company is

to be obligated to provide interconnection service under the Department's proposed rules, then the DG customer should be obligated to pay the actual cost for the service provided. As stated above, to do otherwise, would require other customers to subsidize the costs that DG customers have caused the system to incur, in violation of long-standing Department principles that require rates to be based on cost causation. Basing cost recovery on cost causation sends a direct and appropriate economic price signal to customers, resulting in the efficient use of societal resources. Electric Industry Restructuring, D.P.U. 96-100, at 51 (1996); Gas Unbundling, D.T.E. 98-32-B at 31 (1999) (The Department has a "well-established policy on cost allocation, viz., that cost responsibility must follow cost incurrence," Boston Gas Company, D.P.U. 96-50 (Phase I), at 133-134 (1996); Boston Gas Company, D.P.U. 93-60, at 331-337, 41, 432 (1993); Bay State Gas Company, D.P.U. 92-111, at 54, 283-284, 311-312 (1992); Boston Edison Company, D.P.U. 1720, at 114 (1984); Generic Investigation of Rate Structures, D.P.U. 18810, at 14 (1977)).

The DG Cluster's desire to include a "not to exceed" pricing system may reflect the DG Cluster's perception that, without such a clause, it would be more difficult to protect against inflated costs based on unnecessary construction overruns and potential wasteful expenditures. However, the absence of a fixed price alternative would not leave the DG Cluster exposed to unreasonable costs because the Interconnection Tariff itself provides a detailed dispute resolution process. Interconnection Tariff, at Section 9.0. The dispute resolution process provides an important "backstop" to the reasonableness of all costs to interconnect DG facilities with electric distribution companies. Strict rules

are provided in that process, with the Department serving as the ultimate arbiter of all disputes.

B. DG Customers Should Be Responsible for All Costs Incurred Directly to Permit Interconnection.

As described in the Collaborative's May 15, 2003 tariff filing with the Department, the Collaborative was unable to reach agreement concerning the appropriate allocation of utility costs for studies or upgrades where benefits may accrue to other utility customers (in addition to the DG customer) as a result of upgrades or construction associated with the hook-up of a new DG customer. The Interconnection Tariff language of Section 5.4 reflects this dispute, with the Utility Cluster proposing the following provision:

> **5.4 Separation of Costs**
>
> The Interconnecting Customer shall only pay for the interconnection costs required to allow for safe, reliable parallel operation of the Facility with the Company EPS.

According to this provision, a new DG customer is responsible for all costs that are incurred by a distribution company to allow the DG customer to operate on the Electric Power System ("EPS") (even where some theoretical benefit may be experienced by other customers in addition to the DG customer). In contrast, the DG Cluster maintains that DG customers should bear costs incurred "solely" for the DG customers' exclusive benefit (i.e., costs that are incurred for the DG customer that may also benefit other customers should not be charged to the DG customer). See Interconnection Tariff, Section 5.4 (DG Cluster), which states:

> The Interconnecting Customer shall only pay for that portion of the interconnection costs resulting solely from the System Modifications required to allow for safe, reliable parallel operation of the Facility with the Company [Electric Power System].

In other words, the DG Cluster maintains that a DG customer should not be responsible for costs that are incurred on its behalf where such costs also may provide a system-wide benefit. According to the DG Cluster, such costs would more properly be shared among all customers. However, this position is without merit because at the time such costs are incurred, the value of potential system-wide benefits will be in most instances entirely speculative and of unknown value. Moreover, to the extent that the costs at issue would not have been incurred without the initiation of the DG installation, it would be inequitable to increase costs to other customers because of the DG's actions while permitting the DG installation to retain all of the benefits. To regard such costs as the responsibility of all customers would unfairly burden them with costs that were not incurred on their behalf, but rather were incurred directly because of the DG's request for service. Here again, the DG Cluster's proposal flies in the face of the Department's well-established policy on cost allocation, viz., that cost responsibility must follow cost incurrence. Gas Unbundling, D.T.E. 98-32-B at 31 (1999); Electric Industry Restructuring, D.P.U. 96-100, at 51 (1996); Generic Investigation of Rate Structures, D.P.U. 18810, at 14 (1977).

The Supreme Judicial Court (the "SJC") has previously rejected the approach suggested by the DG Cluster in Bertone v. Department of Public Utilities, 411 Mass. 536 (1992). There, the Department did not adopt the arguments of new customers charged with hook-up charges who claimed that such charges were discriminatory because they

subsidize future users of the system who would benefit from their hook-up payments to the utility. The SJC stated the following in Bertone:

> The [D]epartment also properly dismissed as "speculative" the Bertones' additional argument that the hook-up charge was unreasonably discriminatory because it "subsidizes" future users, namely users who request service after the development facilitation plan expenses are paid off. The argument boils down to an assertion that [the electric company] may have constructed slightly more capacity than it needs to serve those new customers who actually do come on line in the forecasted period. *To avoid this problem completely, however, utilities would be required constantly to perform some kind of "rolling reconciliation," as the [electric company] suggests, to include future, but reasonably unforeseen, customers instead of being required to revise prospective charges as conditions and costs substantially change.* This would obviously be impractical and would prevent any imposition of marginal cost-based ratemaking based on reasonably foreseeable expenditures and revenues.

Id. at 546, ftnt.11 (emphasis added).

Consistent with this holding, the general assertion of system-wide benefits provides too great an opportunity for idle speculation to replace long-standing cost-causation principles. Accordingly, the Utility Cluster properly proposed that it be permitted to charge the DG customer for all reasonable costs that are incurred as a result of the DG customer's request for service. This rule of general applicability would not preclude the possibility that specific circumstances could arise in particular instances where an allocation of costs could be deemed appropriate, but such instances should be determined and addressed on a case-by-case basis.

C. The Timelines Proposed by the Collaborative Are Reasonable.

All stakeholders in the Collaborative, with the exception of RealEnergy, have reached a broad consensus on the appropriate timelines necessary to review and obtain appropriate interconnections for DG customer service. Notably, RealEnergy also agreed

to the Collaborative's time frames for the Simplified Interconnection Process, but seeks shorter time frames than the Collaborative for both the Standard and Expedited Interconnection Process under the Interconnection Tariff. Interconnection Tariff at 18 (Table 1).[4] RealEnergy's proposed timelines represent only one-half of the time requirements agreed upon by all other members of the Collaborative. Id.

It should be noted that the timelines recommended by the Collaborative are the product of substantial "give-and-take" negotiations and compromise on behalf of all participants. RealEnergy asks the Department to ignore the results of this delicate negotiation in favor of specific time lines that would appear to provide some unique benefit to RealEnergy only. NSTAR Electric contends that the carefully negotiated results obtained from the Collaborative process should not be rejected to accommodate the desires of a single participant to reach a different outcome. Undoubtedly, there are elements of the Interconnection Process and Tariff that all parties, including NSTAR Electric, may not endorse on a stand-alone basis. However, the product of the Collaborative process is nonetheless an appropriate starting point to initiate the DG process in Massachusetts and NSTAR Electric supports such collaboration. As the Collaborative process itself recognizes, further experience over the next two years will inform the process and enable the parties to continue to make appropriate refinements

[4] As defined in Interconnection Tariff, Section 3.0, the Simplified path is applicable to qualified inverter-based facilities with a power rating of 10 kilowatts ("kW") or less on radial or spot network EPSs under certain conditions. The Expedited path is for certified facilities that pass certain pre-specified screens on a radial EPS and the Standard path is for all facilities not qualifying for either the Simplified or Expedited interconnection processes on radial and spot network EPSs, and for all Facilities on area network EPSs.

where appropriate. NSTAR Electric suggests that this is the best way of addressing such scheduling and timing issues.

NSTAR Electric also anticipates that RealEnergy may suggest that the Department's Qualifying Facilities ("QFs") regulations include certain deadlines that are more reflective of the time lines RealEnergy proposes here. Without addressing here the substance of that argument, the fact remains that the end product of the Collaborative reflects a broad consensus of all other Collaborative participants (except RealEnergy) and isolated issues should not be subject to a pick-and-choose approach. The broad consensus achieved by the Collaborative should be followed by the Department. See also Section II.E, infra.

D. The Interconnection Service Agreement Should Be Subject to the Interconnection Tariff.

The Collaborative was unable to reach agreement on what document controls in circumstances where an existing Interconnection Service Agreement is in conflict with the requirements of the Interconnection Tariff because of changes that are made to the Interconnection Tariff after the Interconnection Service Agreement is executed. The Interconnection Service Agreement proposed by the Utility Cluster provides that, in the event of a conflict between the Interconnection Service Agreement and the terms of the Interconnection Tariff, "the terms of the [Interconnection] Tariff shall control." Interconnection Service Agreement, at Section 20. In contrast, the DG Cluster maintains that the terms of the Interconnection Service Agreement should control in the event of a conflict between the Interconnection Tariff and the Interconnection Service Agreement. Id. As a matter of sound regulatory practice, NSTAR Electric believes that the terms of

the Interconnection Tariff should control unless the terms of a particular Interconnection Service Agreement are grandfathered by the Department on a case-by-case basis after appropriate regulatory review.

Pursuant to G.L. c. 164, § 94, gas and electric companies in Massachusetts may charge for the provision of service under two arrangements: (1) by tariff ("schedule" of "rates, prices and charges"), and (2) by contract. Tewksbury LNG, D.P.U. 97-49, at 27 (1997). "The Department reviews such contracts to determine whether approval of those contracts would be in the public interest." Id., citing Boston Gas Company, D.P.U. 90-17/18/55, at 179-180 (1990); Colonial Gas Company, D.P.U. 90-210, at 12-13 (1990). The proposed model Interconnection Tariff is not separable from Exhibit A to the Interconnection Tariff, which is the Interconnection Service Agreement. Accordingly, although the Interconnection Service Agreement takes the form of a contract, it is in fact a Standard Form Contract whose purpose is to implement the Interconnection Tariff. As is the case more generally with utility service, the Interconnection Tariff is the governing document that sets forth the operative terms and conditions and obligation of parties. The Standard Form allows the parties to identify unique features of the service to be provided by including, for example, a Description of Facilities (Attachment 2), a Description of System Modifications (Attachment 3) and Special Operating Requirements (if any) (Attachment 5). However, the Standard Form Contract is available for use only after the Tariff is approved by the Department. Having the Interconnection Tariff as the governing document ensures that the rights of all parties follow Department policy as it evolves over time.

Because the Standard Form Contract derives its legal authority from the Department's approval of the *Interconnection Tariff* (which includes the Interconnection Service Agreement), it is critical that the Interconnection Service Agreement include a specific provision that the terms of the Interconnection Tariff, as it may be amended from time to time, shall control. In particular, the following provision is proposed by the Utility Cluster:

> **20. Supercedence**
>
> In the event of a conflict between this Agreement, the Interconnection Tariff, or the terms of any other tariff, Exhibit or Attachment incorporated by reference, the terms of the Interconnection Tariff, as the same may be amended from time to time, shall control.

NSTAR Electric does not object to the Department's authority to permit, where appropriate, certain customers to continue to take service under a tariff once approved but later canceled by the Department. These "grandfathered" customers, however, would continue to take service under the canceled tariff at the Department's discretion only and, where applicable, for only a limited time period. See Commonwealth Electric Company, D.P.U. 93-41, at 35-36 (1993) (the Department grandfathers customers under Department-approved Economic Development Rate.) The application of this approach allows greater Department control and oversight over agreements entered into pursuant to tariffs that are no longer in the public interest.

E. The Interconnection Tariff Requirements Properly Should Replace Applicable Portions of 220 C.M.R. 8.00 et seq.

The Collaborative has been unable to reach consensus concerning the continued applicability of 220 C.M.R. 8.04 (e.g., timelines and fees) after the Interconnection Tariff

is approved by the Department. NSTAR Electric believes that the Collaborative's success in achieving the model Interconnection Tariff should now be adopted by the Department, and should be used in place of 220 C.M.R. 8.04, where otherwise applicable, to govern conditions and standards for interconnecting to electric company systems.

The Department's QF regulations, 220 C.M.R. 8.00 et seq., establish the rates, terms and conditions of sales of electricity by qualifying facilities and on-site generating facilities, as defined therein, to distribution companies. 220 C.M.R. 8.01(1). The QF regulations also establish procedures for the interconnection and metering of qualifying facilities, including standards and conditions for interconnection, interconnection costs and metering. Although certain aspects of QFs properly should continue to be regulated by the Department pursuant to 220 C.M.R. 8.00 et seq. (e.g., short-run capacity and energy rate requirements), the applicability of two separate sets of regulations governing interconnection policies and procedures will inevitably lead to confusion and unwanted opportunities for "gaming." Accordingly, to avoid the potential for such confusion and gaming of the regulatory process, NSTAR Electric believes that the Department should substitute those sections of 220 C.M.R. 8.04 with the elements of the proposed Interconnection Tariff that address all components of the conditions, standards and timelines for interconnection. This approach will ensure consistency and fairness in the treatment of QFs and non-QFs in the DG context. In the alternative, to ensure consistency between the QF regulations and the applicable DG tariff and terms and conditions, the Department should adopt in a separate rulemaking proceeding any needed changes in the QF regulations.

As referenced above, the Collaborative has asked the Department to authorize the DG Collaborative to conduct an ongoing collaborative process, as set forth in the Report filed on March 3, for the purpose of continuing to identify and recommend improvements to the DG interconnection process. As additional experience is gained with interconnection of DG facilities, the Department may wish to "fine tune" the terms and conditions of the Interconnection Tariff in the future.

F. Distribution Companies Should Continue To Own Meters.

The Collaborative was unable to reach complete agreement concerning meter ownership requirements. The Utility Cluster maintains that the utility should own the revenue meter and the Interconnecting Customer should pay a monthly charge to cover taxes, meter maintenance, incremental reading and billing costs, the allowable return on the invoice cost of the meter and the depreciation of the meter.[5] Interconnection Tariff, at Section 8.1.

As described in the Department's Order in Model Terms and Conditions, D.T.E. 97-65, at 56-60 (1997), the Department's proposed model terms and conditions proposed that competitive suppliers would bear the cost of providing and installing meters at customer premises and that the distribution company would install, test, maintain and own the required metering. Id. at 56. The Department concluded that:

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[5] An exception is made for an Interconnection Customer who is a Qualifying Facility or On-Site Generating Facility under 220 C.M.R. 8.00 et seq. Consistent with these regulations, these customers may elect to own the meter. If the Interconnecting Customer elects to install its own meter under the QF regulations, the Interconnecting Customer shall be responsible for purchasing and installing software, hardware and/or other technology that may be required by the Company to read billing meters. Interconnection Tariff, at Section 8.1.

> [B]efore it is feasible for customers or their competitive suppliers to own meters, many technical issues must be resolved. These unresolved technical issues include a certification process for the meter, standards for metering, communication standards, and protocols for what happens to the meter if a customer terminates service with the competitive supplier for any reason.

Id. at 60. The Department required that meter ownership remain with the distribution company until the technical issues are resolved. Id. The issues identified by the Department that would prevent customer ownership of a meter have not yet been resolved and the Department's policy articulated in D.T.E. 97-65 should be carried forward consistently. Accordingly, NSTAR Electric believes that revenue meters should be owned solely by distribution companies to eliminate the numerous technical concerns previously identified by the Department.

G. Network Safety Considerations Deserve Critical Consideration.

A careful evaluation of interconnection requirements for DG requires planners and regulators to understand the unique requirements and challenges presented by an urban environment where customers are typically served by a "secondary network" configuration. Many downtown areas of cities, such as Boston, are served by underground low-voltage "secondary network" systems, where service is provided through multiple transformers that allow for multiple paths over which electricity can flow to a single customer location. The redundancy implicit in this design allows the Company to meet higher reliability needs commonly found in urban areas. In contrast, a radial (single source) distribution system serves customers through a single radial feeder that is designed for power flow from the system through a single path to the customer's premises.

The complexity of the integrated network system raises more technical issues than the challenges presented by radial systems when adding DG. For example, to keep power from inappropriately feeding from one transformer back through another transformer (which could "feed" electricity to the location of a "fault" on the primary side of the second transformer), devices known as "network protectors" are used to detect such a back-feed and open the circuit quickly. However, most network protectors have not been designed or tested to operate as a switching device for DG (or other types of generation on the customer side of the protector). As the total generating capacity on a secondary network grows relative to total network load, so does the potential impact of reverse power flow through one or more network protectors, thereby causing them to open and potentially interrupt customers, degrade service quality, or cause safety concerns to distribution company employees. From a safety perspective, reverse power flows through a network protector also have the potential to cause serious bodily injury to company employees working on the electric distribution system.

The protection systems needed to prevent back-feeding of power through network transformers create additional design challenges for interconnection of DG on network systems. The collaborative effort, and the industry as a whole, are exploring potential solutions to enable the interconnection of DG to network systems while maintaining the same level of service reliability, the proper operation of equipment and a safe working environment. At the present time, two solutions have been developed that will enable DG to connect to existing Network Areas:

1. **Radial Interconnection** – Installation of a generating facility on a dedicated radial line, isolated from the network.

2. **Generator Size/Spot Network** – The DG Cluster and the Utility Cluster have agreed that it is technically acceptable to connect 10 kW or smaller DG to "Spot Networks" using "inverter based technology" based on defined minimum customer site loads.

The Collaborative Process spent a great deal of time exploring other potential solutions to enable DGs to connect to network systems. These potential solutions are outlined in the Interconnection Tariff. At the present, these solutions addressed some, but not all, of the major issues needed to technically permit DG connections to area Network Systems.

III. CONCLUSION

The Collaborative has successfully reached a consensus on a wide variety of standards and procedures for interconnecting DG in Massachusetts, which are reflected in the model Interconnection Tariff now before the Department. The Collaborative's negotiations required substantial give-and-take among the parties and the end product reflects a reasonable balance of numerous competing interests. NSTAR Electric submits that the Department should adopt the recommendations offered by the Collaborative in order to preserve the basic structure agreed upon by the parties. NSTAR Electric requests that the Department approve the proposed Interconnection Tariff, as it has been submitted to the Department, with the proposed Utility Cluster language alternatives, for those few instances where no consensus was achieved. NSTAR Electric looks forward to continuing to meet together with other members of the Collaborative over the next two years to refine and improve, where appropriate, the processes and procedures applicable to the successful development of cost-effective DG in Massachusetts.